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10/573,758

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EXAMINER

ELLIOTT IV, BENJAMIN H

ART UNIT

PAPER NUMBER

2419

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,758	<b>Applicant(s)</b> MADEMANN ET AL.	
	<b>Examiner</b> BENJAMIN ELLIOTT	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☒ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/29/2006, 4/04/2007, 1/23/2009</u> .                         | 6) <input type="checkbox"/> Other: _____                          |



### **DETAILED ACTION**

1. Claims 13-24 have been examined and are pending

#### ***Information Disclosure Statement***

2. Initialed and dated copies of the Applicants' IDS form 1449 submitted 3/29/2006 and 4/04/2007 are attached to the instant office action.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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4. Claims 13-15 and 18-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Publication 2004/0184471 A1 to Chauah et al (hereinafter "Chauah").

As per Claim 13, Chauah discloses **a method for transmission in a radio communication system of at least one data block from a base station to a plurality of subscriber terminals in accordance with a point-to- multipoint transmission** ([0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. [0028]. The invention allows for point to multipoint transmission of data.), **comprising:**

**transmitting, by the base station to a selected group from receiving subscriber terminals** ([0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. The first transmission is a first block.), **an explicit request for signaling of information with respect to reception of the at least one data block** ([0038]. The transmitter listens for responses to the sent message.);

**and initiating at least one subsequent transmission of one of the at least one data block by the base station according to the information received from the selected group of subscriber terminals** ([0038]. If the transmitter hears a NACK, it transmits the next block of the message.).

As per Claim 14, Chauah discloses **a method in accordance with claim 13, wherein the at least one data block is allocated to at least one of a unidirectional broadcast and a multicast service** ([0028]. The method provides for the use of

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MBMS, Multimedia Broadcast/Multicast Service.), **and further comprising transmitting the at least one data block in a channel allocated to the at least one of a unidirectional broadcast and a multicast service** ([0041]. Data is sent over a link, wherein receivers in a multicast group receive the multicast data over a common channel.).

As per Claim 15, Chauah discloses **a method in accordance with claim 14, wherein the information regarding the reception of the at least one data block is signaled to the base station in a channel that can be commonly used by the subscriber terminals** ([0025]. For uplink and downlink transmissions, a shared control channel (SCCH) is used. From the base station, HARQ messages are sent, which are retransmissions of data. From the terminal, NACK and ACK messages are sent in response to the first portion of the data block being sent.).

As per Claim 18, Chauah discloses **a method in accordance with claim 13, wherein said initiating of the at least one subsequent transmission of the data block occurs at a network end depending on at least one of a service and parameters allocated to the service** ([0038]. A delay constraint parameter is utilized to control maximum delay between multicast message transmissions.).

As per Claim 19, Chauah discloses **a method in accordance with claim 18, further comprising transmission of a successive data block in accordance with a specified time interval for reception of the information of one of the subscriber terminals** ([0038]. The base station will wait a specific time period before moving on to the next message.).

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As per Claim 20, Chauah discloses **a method in accordance with claim 19, further comprising controlling a transmission power of the base station depending on at least one of the information and a reception strength of the information at the base station** ([0042]. By reducing the signaling in the uplink direction, severity of ACK/NACK collisions decreases and conservation of resources occurs (resources could be power).).

As per Claim 21, Chauah discloses **a radio communication system communicating with subscriber terminals, comprising: at least one base station transmitting a data block to a multiplicity of the subscriber terminals in a coverage area of said base station in accordance with a point-to-multipoint transmission and transmitting an explicit request for signaling of information with respect to a particular reception of at least one data block to a selected group of the multiplicity of subscriber terminals** ([0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. [0028]. The invention allows for point to multipoint transmission of data. [0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. The first transmission is a first block. [0038]. If the transmitter hears a NACK, it transmits the next block of the message.); **and at least one device evaluating the information received from the selected group of subscriber terminals and initiating at least one repeat transmission of the at least one data block to the multiplicity of subscriber terminals according to a result of the evaluating** ([0033]. In terms of group size, a

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threshold is set for evaluation of the size of users in the group. A given group size is evaluated as to whether the base station will retransmit the multicast message.).

As per Claim 22, Chauah discloses **a radio communication system in accordance with claim 21, wherein the at least one device includes a storage device holding the at least one data block for subsequent transmission to the multiplicity of subscriber terminals** ([0031]. A packet size and number of transmissions is determined for the multicast message stored in a buffer of the sender.).

As per Claim 23, Chauah **discloses a base station of a radio communication system communicating with subscriber terminals, comprising:**  
**means for sending at least one data block to a plurality of the subscriber terminals in a coverage area of said base station in accordance with a point-to-multipoint transmission and for transmitting an explicit request for signaling of information with respect to a particular reception of the at least one data block to a selected group of the plurality of subscriber terminals** ([0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. [0028]. The invention allows for point to multipoint transmission of data. [0037]. A base station encodes a multicast message with data blocks to transmit to a group of users. The first transmission is a first block. [0038]. If the transmitter hears a NACK, it transmits the next block of the message.);

**and means for receiving information from the selected group of subscriber terminals, said means for sending configured for subsequent sending of the at least one data block according to the information received form the selected**



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**group of subscriber terminal** (Abstract. A first multicast message is sent, the base station listens for a response from the group of receivers, and based on this response, a next multicast message is sent, or a portion of the previously transmitted message is sent.).

As per Claim 24, Chauah discloses **a subscriber terminal communicating with a base station of a radio communication system, comprising:**

**means for receiving at least one data block transmitted from the base station of the radio communication system according to a point-to-multipoint transmission and an explicit request for signaling of information with respect to a reception of the at least one data block to a plurality of subscriber terminals** (Figure 6b; [0039].

Figure 6b is a diagram showing the viewpoint of the receiver of the multicast message.

The receiver as part of a group receiving the multicast message, waits for the transmission. In response, the receiver is either capable of decoding the message correctly or incorrectly. Transmissions with errors allow the receiver to request retransmission of message.);

**means for generating the information with respect to the reception of the at least one data block** ([0037]. The base station encodes a multicast message for transmission.);

**and means for signaling the information with respect to the reception of the at least one data block to the base station** ([0037]. The base station transmits the first block of the multicast message over a downlink channel to the group of users.).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chauah as applied to claim 1 above, and further in view of US Patent 6,496,551 B1 to Dam et al (hereinafter "Dam").

As per Claim 16, Chauah is silent on **a method in accordance with claim 15, further comprising transmitting one of an access burst and a signaling burst having a number of properties of an access burst as the information initiating the subsequent transmission of the data block.**

However, Dam teaches a method in a radio communication system wherein signaling bursts and access bursts are used in the transmission of information and data (Figure 2A; Figure 2D; Figure 4B; Col. 4, lines 32-40 and lines 60-64; Col. 5, lines 50-55. Normal bursts transmit signaling information and access bursts transmit until they are received at a base station.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Chauah to include sending access bursts as taught by Dam to increase the probability of the base station to successfully receive and interpret the signal sent by the mobile terminal (Dam; Col. 1, lines 15-21).

As per Claim 17, Chauah discloses **a method in accordance with claim 16, wherein the information with respect to the reception of the at least one data block signals that the at least one data block was one of incorrectly received and not received** (Chauah; Figure 6B; [0040]. If a user transmitted a NACK but never

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received the transmission, the user indicates an error (S634) to its upper layer and proceeds to function S612 (listens for messages).).

### ***Conclusion***

9. Prior art made of record not relied upon:

US Patent Publication 2004/0087319 A1 to Bos et al discloses a method for broadcast/multicast in a third generation network.

US Patent 7,242,919 B2 to Kim et al discloses a method and system for multimedia multicast paging.

US Patent 7,177,658 B2 to Willenegger et al discloses a method for MBMS transmission in a wireless communications network.

US Patent Publication 2003/0174678 A1 to Chang et al discloses an apparatus and method for controlling packet data to provide MBMS in a CDMA environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN ELLIOTT whose telephone number is (571)270-7163. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. E./  
Examiner, Art Unit 2419

/Hassan Kizou/  
Supervisory Patent Examiner, Art Unit 2419